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Quiz 4: Incineration

Municipal solid waste incinerator

Incineration has been used on a small scale in the resort island since 1996. One example of an island that has been installed with an incinerator to manage and treat Municipal Solid Waste is Tioman Island. Collecting, transporting and incinerating solid waste in Tioman Island is under the Tioman Development Authority. The company that designed and built the incinerator at Tioman Island is Sumur Mutiara SDN.BHD, while the technology provider for the Tioman incinerator is XCN Technology. The Tioman incinerator has a capacity of 15 tonnes per day, at the cost of RM520.70 per tonne. However, the problem faced by the incinerator is the high cost of operation arising from the high moisture content of the waste, which contributed to high fuel costs and poor technical expertise in maintaining the incinerators, which caused the operation of incinerator discontinued for a while.

Clinical waste incinerator

Human or animal tissue, blood or bodily fluids, excretions, medications, pharmaceutical products, dirty swabs or dressings, syringes, needles, sharps, and any waste that has come into touch with any of the above types of waste are all included in clinical wastes. The Environmental Quality (Scheduled Wastes) Regulations, 2005 classifies clinical waste as scheduled waste in Malaysia. University hospitals, maternity hospitals, general hospitals, and clinics are significant contributors to clinical waste. Therefore, the incinerator that incinerates clinical waste is placed at the incineration plant in Bukit Nenas, Negeri Sembilan, as clinical waste is classed as Schedule Waste. The plant, which opened in November 1998, is based on the Danish Kommunekemi hazardous waste processing plant in Nyborg. The problem regarding the Bukit Nanas

incinerator is the levels of dioxins and furans are not measured every month in the largest hazardous waste incinerator in Peninsular Malaysia, and the stories of dioxins and furans were not even published once.

References:

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- 2) Abd Manaf, L., Samah, M. A. A., & Zukki, N. I. M. (2009). Municipal solid waste management in Malaysia: Practices and challenges. *Waste management*, 29(11), 2902-2906.
- 3) <https://www.inciner8.com/blog/waste-management/what-a-load-of-rubbish/>
- 4) <https://beta2.freemalaysiatoday.net/post/mp-gets-hot-over-bukit-nanas-incinerator>